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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/619,535	07/11/2003	Tavis D. Schriefer	175-0002US	7506
29855	7590	01/11/2006	EXAMINER	
WONG, CABELLO, LUTSCH, RUTHERFORD & BRUCCULERI, P.C. 20333 SH 249 SUITE 600 HOUSTON, TX 77070			LEON, EDWIN A	
			ART UNIT	PAPER NUMBER
			2833	

DATE MAILED: 01/11/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	10/619,535	SCHRIEFER, TAVIS D.	
	Examiner	Art Unit	
	Edwin A. León	2833	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 10 October 2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-51 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 6 and 44-51 is/are allowed.
- 6) ☒ Claim(s) 1-5 and 7-43 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Response to Amendment

1. Applicant's Pre-Appeal Request for Review filed October 5, 2005 has been placed of record in the file.
2. Applicant's request for reconsideration of the finality of the rejection of the last Office action is persuasive and, therefore, the finality of that action is withdrawn.

Claim Rejections - 35 USC § 102

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

4. Claims 1-4, 19, 22-23, 25-26, 28, 34, 39 and 41-42 rejected under 35 U.S.C. 102(b) as being anticipated by Bargellini (UK Patent Application No. 2 170 064 A). With regard to Claim 1, Bargellini (Figs. 1-2 and 9) discloses a connector comprising: a first connector head (1) having an axis; a second connector head (4); and a connection mechanism (7, 16a-b) coupling the first connector head and the second connector head, wherein the connection mechanism is adapted to limit the motion of the

second connector head in a first plane substantially coincident with the axis and in a second plane substantially orthogonal to the axis.

With regard to Claim 2, Bargellini (Figs. 1-2 and 9) discloses the connection mechanism being further adapted to retain the second connector head in a specified position in the first plane.

With regard to Claim 3, Bargellini (Figs. 1-2 and 9) discloses the connection mechanism being further adapted to retain the second connector head in a second specified position in the second plane.

With regard to Claim 4, Bargellini (Figs. 1-2 and 9) discloses the first connector head being further adapted to rotate about the axis.

With regard to Claim 19, Bargellini (Figs. 1-2 and 9) discloses the first connector head and the second connector head comprising different connector head styles.

With regard to Claim 22, Bargellini (Figs. 1-2 and 9) discloses the first connector head being further adapted to rotate about the axis and the second connector head is fixedly oriented in the second plane substantially orthogonal to the axis.

With regard to Claim 23, Bargellini (Figs. 1-2 and 9) discloses the second connector head comprising an electronic device (1).

With regard to Claim 25, Bargellini (Figs. 1-2 and 9) discloses an apparatus comprising: a functional unit (4); a connector head (1) having an axis; and means (7, 16a-b) for coupling the functional unit and the connector head, wherein the means is adapted to limit the motion of the functional unit in a first plane substantially coincident with the axis and in a second plane substantially orthogonal to the axis.

With regard to Claim 26, Bargellini (Figs. 1-2 and 9) discloses the functional unit comprising an electronic device (4).

With regard to Claim 28, Bargellini (Figs. 1-2 and 9) discloses the means being further adapted to rotate about the axis.

With regard to Claim 34, Bargellini (Figs. 1-2 and 9) discloses a system comprising: an electronic device (1) having an external surface (outside surface of 1) with an opening (where 7 is located) defined therein; and a connector (4, 7) rotatably positioned in the opening and having a first surface (outside surface of 4) substantially flush (Fig. 1) with the external surface, the connector operatively coupled to the electronic device and adapted to rotate in a plane parallel to the external surface.

With regard to Claim 39, Bargellini (Figs. 1-2 and 9) discloses the connection mechanism comprising a hinge (16a-b) coupled to the second connector head, and a mechanism (9a-b, 17a-b) coupled to the axis of the first connector head for rotation of the first connector head.

With regard to Claim 41, Bargellini (Figs. 1-2 and 9) discloses the connection mechanism comprising a universal joint (Fig. 9).

With regard to Claim 42, Bargellini (Figs. 1-2 and 9) discloses each of the first and second connector heads comprising a male (4) or female (1) connector.

5. Claims 1-4, 13, 19, 22-23, 25-26, 28, 34, 41 and 43 are rejected under 35 U.S.C. 102(b) as being anticipated by Hiroshi (JP 06111903A). With regard to Claim 1, Hiroshi (Figs. 1 and 3) discloses a connector comprising: a first connector head (1)

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having an axis; a second connector head (5); and a connection mechanism (6-7) coupling the first connector head and the second connector head, wherein the connection mechanism is adapted to limit the motion of the second connector head in a first plane substantially coincident with the axis and in a second plane substantially orthogonal to the axis.

With regard to Claim 2, Hiroshi (Figs. 3-4) discloses the connection mechanism being further adapted to retain the second connector head in a specified position in the first plane.

With regard to Claim 3, Hiroshi (Figs. 3-4) discloses the connection mechanism being further adapted to retain the second connector head in a second specified position in the second plane.

With regard to Claim 4, Hiroshi (Figs. 3-4) discloses the first connector head being further adapted to rotate about the axis.

With regard to Claim 13, Hiroshi (Figs. 1 and 3) discloses the second connector head comprising a cable (9).

With regard to Claim 19, Hiroshi (Figs. 1 and 3) discloses the first connector head and the second connector head comprising different connector head styles.

With regard to Claim 22, Hiroshi (Figs. 3-4) discloses the first connector head being further adapted to rotate about the axis and the second connector head is fixedly oriented in the second plane substantially orthogonal to the axis.

With regard to Claim 23, Hiroshi (Figs. 1 and 3) discloses the second connector head comprising an electronic device (1).

With regard to Claim 25, Hiroshi (Figs. 1 and 3) discloses an apparatus comprising: a functional unit (1); a connector head (5) having an axis; and means (6-7) for coupling the functional unit and the connector head, wherein the means is adapted to limit the motion of the functional unit in a first plane substantially coincident with the axis and in a second plane substantially orthogonal to the axis.

With regard to Claim 26, Hiroshi (Figs. 1 and 3) discloses the functional unit comprising an electronic device (1).

With regard to Claim 28, Hiroshi (Figs. 1 and 3) discloses the means being further adapted to rotate about the axis.

With regard to Claim 34, Hiroshi (Figs. 1 and 3) discloses a system comprising: an electronic device (5) having an external surface (front outside surface of 5) with an opening (where 4 is located) defined therein; and a connector (1) rotatably positioned in the opening and having a first surface (front surface of 2) substantially flush with the external surface, the connector operatively coupled to the electronic device and adapted to rotate in a plane parallel to the external surface.

With regard to Claim 41, Hiroshi (Figs. 1 and 3) discloses the connection mechanism comprising a universal joint (6-7).

With regard to Claim 43, Hiroshi (Figs. 1 and 3) discloses the first connector head comprising a male connector (1), and wherein the second connector head comprises a cable (9).

Claim Rejections - 35 USC § 103

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which the subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

7. Claims 5, 7-8, 10, 20-21 and 29-33 are rejected under 35 U.S.C. 103(a) as being unpatentable over Bargellini (UK Patent Application No. 2 170 064 A) in view of Reichle (U.S. Patent No. 6,116,958). Bargellini discloses the claimed invention as shown above except for a third connector head coupled to the connection mechanism, the connection mechanism adapted to limit motion of the third connector head to the first and second planes, the second and third connector heads are adapted to move in concert, the third connector head comprising a device slot, the third connector head comprising an electronic device, the first connector head comprising a different connector head style from at least one of the second and third connector heads, the connection mechanism is further adapted to comprise means for implementing a hub function between the first connector head and the second and third connector heads, a second connector head wherein the means is further adapted to limit motion of the second connector head to the first and second planes, the functional unit and the second connector head are adapted to move independent of each other, the functional unit and the second connector head are adapted to move in concert, the connector head and the second

connector head comprise the same connector head style.

Reichle (Figs. 1-2) discloses a similar connector having a third connector head (half of 2 in which 6 is located) coupled to the connection mechanism (4), the connection mechanism adapted to limit motion of the third connector head to the first and second planes, the second (half of 2 in which 5 is located) and third connector heads are adapted to move in concert, the third connector head comprising a device slot (6), the third connector head comprising an electronic device, the first connector head (1) comprising a different connector head style from at least one of the second and third connector heads, the connection mechanism is further adapted to comprise means (4) for implementing a hub function between the first connector head and the second and third connector heads, a second connector head (half of 2 in which 5 is located) wherein the means (4) is further adapted to limit motion of the second connector head to the first and second planes, the functional unit (1) and the second connector head (half of 2 in which 5 is located) are adapted to move independent of each other, the functional unit and the second connector head are adapted to move in concert, the connector head (half of 2 in which 6 is located) and the second connector head comprise the same connector head style.

Thus, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the connector of Bargelini by including a third connector head coupled to the connection mechanism, the connection mechanism adapted to limit motion of the third connector head to the first and second planes, the second and third connector heads are adapted to move in concert, the third connector head comprising a

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device slot, the third connector head comprising an electronic device, the first connector head comprising a different connector head style from at least one of the second and third connector heads, the connection mechanism is further adapted to comprise means for implementing a hub function between the first connector head and the second and third connector heads, a second connector head wherein the means is further adapted to limit motion of the second connector head to the first and second planes, the functional unit and the second connector head are adapted to move independent of each other, the functional unit and the second connector head are adapted to move in concert, the connector head and the second connector head comprise the same connector head style as taught in Reichle in order to avoid the use of more than one connector making the connector more versatile. (Reichle, Column 1, Lines 12-18).

8. Claims 9 and 11-12 are rejected under 35 U.S.C. 103(a) as being unpatentable over Bargellini (UK Patent Application No. 2 170 064 A) in view of Reichle (U.S. Patent No. 6,116,958) in further view of Applicant's admitted prior art. The combination of Bargellini and Reichle discloses the claimed invention as shown above except for the device slot comprising a device slot selected from the group consisting of Universal Serial Bus, FireWire, BlueTooth, video, RS232 and memory device slots, the electronic device comprising a device selected from the group consisting of Universal Serial Bus, FireWire, BlueTooth, video, RS232 and memory devices.

Applicant's admitted prior art (Paragraph 004) discloses similar connector using of BlueTooth, memory device slots and memory devices.

Thus, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the connector of Bargellini and Reichle by using it in devices as BlueTooth, memory device slots and memory devices as taught in Applicant's admitted prior art in order to interconnect different devices more effectively.

9. Claims 14-18, 35-36 and 40 are rejected under 35 U.S.C. 103(a) as being unpatentable over Bargellini (UK Patent Application No. 2 170 064 A) in view of Stout et al. (U.S. Patent No. 6,394,813). Bargellini discloses the claimed invention as shown above except for the first connector head being fixedly coupled to an electronic device, the portable electronic device is selected from the group consisting of personal digital assistant, telephone, camera and personal computer electronic devices, the electronic device comprising a portable electronic device, the portable electronic device comprising a personal computer, the first connector head is fixedly coupled to a corner of the portable electronic device, the first connector head comprising a male or female connector, and wherein the second connector head comprising an antenna.

Stout et al. (Figs. 1 and 3) discloses a similar connector having first connector head (16) being fixedly coupled to an electronic device (10), the portable electronic device is selected from the group consisting of personal digital assistant, telephone, camera and personal computer electronic devices (10), the electronic device comprising a portable electronic device (10), the portable electronic device comprising a personal computer (10), the first connector head is fixedly coupled to a corner (Fig. 1) of the

portable electronic device, the first connector head comprising a male or female connector (16), and wherein the second connector head comprising an antenna (14).

Thus, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the connector of Bargellini by including the first connector head being fixedly coupled to an electronic device, the portable electronic device is selected from the group consisting of personal digital assistant, telephone, camera and personal computer electronic devices, the electronic device comprising a portable electronic device, the portable electronic device comprising a personal computer, the first connector head is fixedly coupled to a corner of the portable electronic device, the first connector head comprising a male or female connector, and wherein the second connector head comprising an antenna as taught in Stout et al. in order to allow the connector to be use in electrical connections between peripheral and host devices.

10. Claims 24, 27 and 37-38 rejected under 35 U.S.C. 103(a) as being unpatentable over Bargellini (UK Patent Application No. 2 170 064 A) in view of Applicant's admitted prior art. Bargellini discloses the claimed invention as shown above except for the electronic device comprising an electronic memory device, the electronic device comprising an electronic memory device, the connector comprising a Universal Serial Bus connector and the connector comprising a connector selected from the group consisting of FireWire, BlueTooth, video and RS232 connectors.

Applicant's admitted prior art (Paragraph 004) discloses similar connector using of BlueTooth, memory device slots and memory devices.

Thus, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the connector of Bargellini by using it in devices as BlueTooth, memory device slots and memory devices as taught in Applicant's admitted prior art in order to interconnect different devices more effectively.


Allowable Subject Matter

11. Claims 6 and 44-51 are allowed for the reasons stated in the Office Action of July 16, 2004.

Conclusion

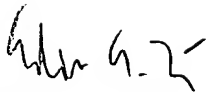
12. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Edwin A. León whose telephone number is (571) 272-2008. The examiner can normally be reached on Monday - Friday 10:00-6:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Paula A. Bradley can be reached on 571-272-2800, extension 33. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.


P. AUSTIN BRADLEY
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2800

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Edwin A. Leon
AU 2833

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January 4, 2006